



MARSHALL STAR

Serving the Marshall Space Flight Center Community

Feb. 22, 2007

An interview with Rose Allen, director of the Office of Strategic Analysis and Communications

Integrating knowledge and communications across the center

What is the purpose of the Office of Strategic Analysis and Communications and how does it support the center?

We're here to develop and deliver relevant, integrated and timely information, recommendations and communications so that the projects and the center can be successful. The office was created in the 2005 reorganization because Marshall needed a way to integrate information between and among the program/project and institutional sides of the house.

Although our governing councils — the Project Management Council/Center Management Council, Integrated Management Systems Board and Strategic Planning Council — had been in place since 2004 and were designed to promote integration, we as a center were still struggling with gaining a complete understanding of the issues we were facing — issues with our business base, our capabilities and our stakeholders. Center leadership needed to develop a common understanding or 'whole pictures' of a variety of situations so they would be equipped to have informed discussions and make informed decisions.

So our office was conceived to provide that. We were asked to build an integrated planning, analysis and communications capability for the center to improve our decision making and relationships.

While we don't make decisions for the center, or "own" the data sources, our work integrating relevant information, performing analysis and creating options for consideration is a value-added service to the center.



Doug Stoffer/MSFC

Rose Allen, director of the Office of Strategic Analysis and Communications, discusses the key focus areas of her office.

How do you go about integrating, analyzing and teeing up options?

Well, it's definitely an ongoing process! But we do have a plan, and we have made progress.

We identified several key areas where we could make a positive impact. First, we create business knowledge through research and analysis of our environment, provide ongoing assessments of project and institutional performance, and run engineering cost-estimating. These give us a clearer understanding of our performance, issues, agency direction, and changes and events in our external environment that could impact our business.

The next step is to use this knowledge to help align the center's work and resources with the agency's direction and achieve our goals. That's the "formal" goal. In plain language, in a time of very tight budgets in which we are fully or oversubscribed and also have very clear mission goals, "alignment" means keeping all of our resources focused on meeting those goals and not pulling in many directions. We develop options and recommendations for Marshall's leadership on important topics, such as budget strategy, product line health, center investments, mission support goals and integrated workforce pictures.

Our office is also helping build the skills, tools, data and methods that will improve our center's program and project planning and control capability. It's a critical competency for the whole agency and so we act as a focal point for nurturing those capabilities at Marshall.

See Allen on page 4

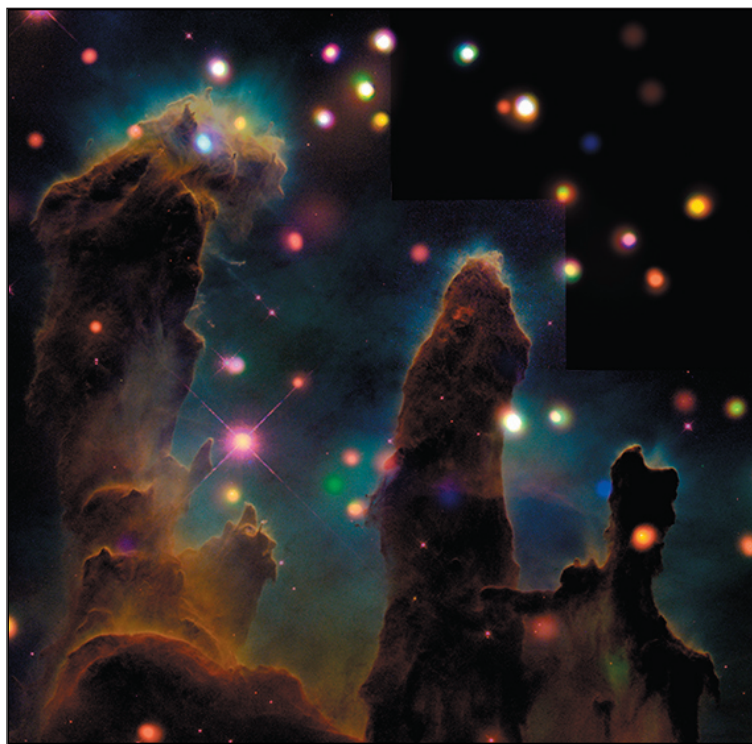
Atlantis rolls to the pad

Space Shuttle Atlantis rolled out of the Vehicle Assembly Building at the Kennedy Space Center, Fla., on Thursday, Feb. 15, for its 3.4-mile journey to Launch Pad 39A.

Resting atop the crawler transporter, Atlantis made its approximately six-hour trip to the pad. Once safely in place on the pad, payloads were transferred into the orbiter's payload bay. The flight of Atlantis to the International Space Station is targeted for March 15.

The STS-117 crew will install a new truss segment, retract a set of solar arrays and unfold a new set on the starboard side of the station. Lessons learned from two previous shuttle missions will provide the astronauts with new techniques and tools to perform their duties. The launch of STS-117 will be the first liftoff from Pad 39A in four years.

Commanding the Atlantis team is Frederick Sturckow, a veteran of two shuttle missions (STS-88, STS-105). Lee Archambault will be making his first flight as the shuttle's pilot. Mission specialists James Reilly (STS-89, STS-104) and Patrick Forrester (STS-105) will be returning to the station. Steven Swanson and John Olivas, both mission specialists, join the crew for their first flight into space.



NASA/CXC/U.Colorado/Linsky et al.; Optical: NASA/ESA/STScI/ASU/J.Hester & P.Scowen.

Chandra peers into the 'Pillars of Creation'

A new look at the famous Pillars of Creation with NASA's Chandra X-ray Observatory has allowed astronomers to peer inside the dark columns of gas and dust. This penetrating view of the central region of the Eagle Nebula reveals how much star formation is happening inside these iconic structures. The Marshall Center manages the Chandra program.

THEMIS successfully launches

NASA Headquarters news release

NASA's THEMIS mission successfully launched Saturday, Feb. 17, at 5:01 p.m. CST from Pad 17-B at Cape Canaveral Air Force Station, Fla.

THEMIS stands for Time History of Events and Macroscale Interactions during Substorms. It is NASA's first five-satellite mission launched on board a single rocket. The spacecraft separated from the launch vehicle approximately 73 minutes after liftoff. By 7:07 p.m., mission operators at the University of California, Berkeley, commanded and received signals from all five spacecraft, confirming nominal separation status.

The mission will help resolve the mystery of what triggers geomagnetic substorms. Substorms are atmospheric events visible in the Northern Hemisphere as a sudden brightening of the Northern Lights, or aurora borealis. The findings from the mission may help protect commercial satellites and humans in space from the adverse effects of particle radiation.

THEMIS' satellite constellation will line up along the sun-Earth line, collect coordinated measurements, and observe substorms during the two-year mission. Data collected from the five identical probes will help pinpoint where and when substorms begin, a feat impossible with any previous single-satellite mission.

"The THEMIS mission will make a breakthrough in our understanding of how Earth's magnetosphere stores and releases energy from the sun and also will demonstrate the tremendous potential that constellation missions have for space exploration," said Vassilis Angelopoulos, THEMIS principal investigator at the University of California, Berkeley. "THEMIS' unique alignments also will answer how the sun-Earth interaction is affected by Earth's bow shock, and how 'killer electrons' at Earth's radiation belts are accelerated."

The Mission Operations Center at the University of California,

Berkeley, will monitor the health and status of the five satellites. Instrument scientists will turn on and characterize the instruments during the next 30 days. The center will then assign each spacecraft a target orbit within the THEMIS constellation based on its performance. Mission operators will direct the spacecraft to their final orbits in mid-September.

During the mission, the five THEMIS satellites will observe an

estimated 30 substorms in process. At the same time, 20 ground observatories in Alaska and Canada will time the aurora and space currents. The relative timing between the five spacecraft and ground observations underneath them will help scientists determine the elusive substorm trigger mechanism.

"I am proud to manage the fifth medium-class mission of the Explorer Program," said Willis S. Jenkins, the THEMIS program executive. "As we seek the answer to a compelling scientific question in geospace physics, we are keeping up the tradition that began with Explorer I."

NASA's Launch Services Program at the Kennedy Space Center was responsible for the launch of THEMIS aboard a Delta II rocket. The United Launch Alliance, Denver, provided launch service.

The Explorer Program Office at Goddard manages the NASA-funded THEMIS mission. The Space Sciences Laboratory

at the University of California, Berkeley, is responsible for project management, space and ground-based instruments, mission integration, mission operations and science. Swales Aerospace, Beltsville, Md., built the THEMIS probes. THEMIS is an international project conducted in partnership with Germany, France, Austria and Canada.

For more information about the THEMIS mission and imagery on the Web, go to <http://www.nasa.gov/themis>.



NASA
The Delta II rocket with NASA's THEMIS spacecraft on board lifts off Pad 17-B.

Finally, we focus on fostering effective communications and relationships with our key stakeholders. It's a way to advance NASA's and Marshall's priorities by communicating clearly and consistently with our stakeholders, which include our employees, industry, Headquarters, our community, the media and Congress in coordination with Headquarters. We develop and distribute communication products and services — and ensure that the messages are integrated across them — so that our stakeholders are receiving reliable and timely information. Communication is the way we keep our stakeholders engaged, supportive and sharing a common understanding of what the center is and does.

How is Office of Strategic Analysis and Communications organized to accomplish its goals?

You can think of OSAC as being organized into two main functions — communication management and performance management. There are five offices that support these functions: Business Planning and Integration, Public and Employee Communications, External Relations, Performance and Capabilities Management, and Engineering Cost.

Employees often observe that agency and center communications

need improvement. We heard this in the Marshall Organizational Culture survey last year, and it was also echoed in an agencywide Culture Survey. Part of improving communications is personal — changes in employee and supervisor behaviors and attitude. But part can — and should — be “managed.” That means getting useful and integrated information out in a timely manner. It means improving our products so that they're worth people taking the time to read. It means rebuilding a sense of community at the center so that we all have a stake in each others' success. Our Public and Employee

Communications and External Relations offices focus their energies on these challenges, with the Business Planning and Integration Office underpinning the communication strategy and priorities with measurement and analysis.

On the other side of our OSAC house, the focus is on performance management. We've all encountered situations where the left hand doesn't know what the right hand is doing, or where we wish we had more information on the table before we made a decision. Our world shifts around us constantly, and we need a way to manage ourselves that keeps us at the top of our game and anticipating change. But how do we know what's going on inside and outside the center, or how healthy we are, or how well we're doing? It takes data and analysis. Sometimes it's as simple as juxtaposing information from several different sources to yield a better discussion and decision. Sometimes it takes in-depth, analytical techniques. And these are what the Engineering Cost, Performance and Capability Management, and Business Planning and Integration offices do.

The point is, we want to ensure that the center stays aligned to the agency's direction and that our leadership shares an understanding of and communicates where our opportunities and challenges lie.

What are the greatest strengths of the Office of Strategic Analysis and Communications?

Clearly, our team of dedicated and committed people is our strongest attribute. The civil servants and contractors on our team offer a diversity of skills and perspectives to help us meet customer needs in both the communication and performance management 'sides of the house.' Each person on our team is critical to our ability to serve the center and its projects and organizations, and we count on each other to routinely deliver a broad range of products and services.

We started with a strong foundation on the communications side but wanted to find new ways to integrate our activities across all functions and stakeholder groups so that our messages are clear, credible and consistent. On the performance management side of the organization, we brought people together from across the center to build a new capability. We asked them to come together, think, relate and act in new ways, while also considering how to use the capabilities they brought with them to bring new and innovative ideas to the table. Our team members are committed to doing the best possible job in service to the center and the agency, and they have shown a great willingness to accept new challenges and think differently about how we can add value to the center's organizations.

How do you ensure that you successfully meet your customers' needs?

We try to be very collaborative and listen to what different organizations and stakeholders need. This is challenging because



Allen says it is important for her office to communicate clearly and consistently with stakeholders so they receive reliable and timely information.

See Allen on page 5

the projects and organizations we support are very diverse. And they are at different points in their life cycles, each with different customers, needs, opportunities, information and requirements. Our job is to meet their unique needs, while also ensuring alignment with the agency and center direction and messages.

For example, the shuttle program is very well established. They understand their data requirements and communication systems, and can easily convey the type of support they need. The Ares project, on the other hand, is a new development project, and what they need from us is very different from the shuttle program. The Ares project processes are evolving, and the data is new and in constant change. Our office has to be readily available to accommodate the frequent changes. The Science and Mission Systems Office is different from both the shuttle program and the Ares project in that it integrates both science and exploration and has a multitude of projects within the organization, which OSAC must support.

In the long haul, we have to be a group of learners, sharing information with each other and with others outside OSAC, being creative and innovative, and seeking simpler, better and more integrated ways to deliver our products and services.

What are the main challenges and opportunities you see in the future for OSAC?

We need people with experience at different levels and with different agency and center perspectives to effectively meet the center's needs. Our office must have a sense of the issues facing the center, anticipate needs, and then provide the products and services

that will meet those needs. Our biggest challenge across every function and every office is to build and maintain the 'business acumen' to understand and integrate data and information so that we support the center's decision making and communications.

Specific opportunities that lie ahead for us include sustaining and finding new and innovative ways to communicate our center's capabilities in key science areas. We have also been engaged by Headquarters to bring some of our thinking about employee communication and message management to others across the agency. We have worked hard to enhance our internal communication approaches and products and are excited about the opportunity to lead agency initiatives in this area.

We have also recently been asked to help the center develop its external relationships more effectively, focusing on technology areas with the most value to the agency and center. We are busy with business base analysis and forecasting, managing external agreements, and monitoring and analyzing customer satisfaction. Any one of these would pose a challenge, but taken together, our plate is quite full!

The key for our office, now and in the future, is to be agile, open and comfortable with change. We need to be ready to adapt to new approaches that meet the center's needs more quickly or communicate the agency and center's messages more effectively. We have just completed our first year as an organization, and we are evolving from a reactive organization to one that anticipates and plans. We look forward to the future and to supporting the center and its projects in successfully achieving our mission.

Rita Roberts, an ASRI employee who supports the Office of Strategic Analysis and Communications, conducted this interview for the "Marshall Star."

Classified Ads

To submit a classified ad to the Marshall Star, go to Inside Marshall, to "Employee Resources," and click on "Employee Ads — Submit Ad." Ads are limited to 15 words, including contact numbers. No sales pitches. Deadline for the next issue is 4:30 p.m. Thursday.

Miscellaneous

Bread oven, \$30; electric hamburger maker, \$15; pizza oven, \$25; Quesadilla maker, \$20. 772-1870
Maytag LAT9306 washer, \$200. 256-797-1526
AKC Lab puppies, all colors, parents DNA certified, \$200. 256-729-1871
Brindle Boxer puppies, 4 females, 1 male, ready now. 883-6065
Paint ball equipment, 2 guns, mask, loaders, CO2 cylinder, used once, \$325. 883-8340
Two 5th Row Broadway Theatre League tickets, E5/E6, "Wonderful Town," March 30, 8 p.m., \$108. 325-0085
Corner computer armoire, popular wood, light oak finish, must pick up, \$175. 829-0285

Coleman pop-up camper, spacious storage compartment, clean, \$3,800. 256-891-1073
2001 Yamaha golf cart, green w/white seats, windshield, headlights, needs batteries, \$1,500. 881-2939
Den furniture: gold couch/chair, \$75; recliners, \$75 each; solid maple tables. 837-6776
Diamond engagement ring, .41 carat total weight, 14K white gold, best offer. 256-599-1277
Kitchen Aid "Special Edition" professional stand mixer, model #KSM5, many features, \$225. 256-233-4670
Men's left-handed golf clubs: woods 1/3/5, irons 3-9, PW, SW, putter, no bag, \$100. 882-3983
Sauder computer desk w/hutch and CD holders, \$125. 233-5620
Plumbing tools, piping thread tri-fold stand and dies, iron pipe cutters and more, \$200. 880-7378
Round solitaire diamond ring, 1.33 carat, yellow gold, appraised \$6,000, \$2,750. 582-4605

Vehicles

1986 Ford E350 15-passenger van, 70K original miles, front/rear a/c, \$1,950. 227-0339/Dave
1990 Grand Caravan 7-passenger, new battery/alternator, 200K miles, 20 mpg, \$1,400. 536-7190
1986 Nissan 300ZX, 111.5K miles, \$4,000. 256-684-6524
ProCraft boat, 16', 115 HP Evinrude, foot control, trolling motor, \$2,000. 256-772-9768
Cabin cruiser, 29', 95 SeaRay Sundancer, 7.4L Mercruiser, 300HP, Bravo III, sleeps 6. 679-0705
1997 Jeep Grand Cherokee Laredo, leather, red, 4.0L, 6-cyl., 191K highway miles, 23mpg, \$3,700. 256-599-3094

2002 Honda Accord, 2 door V6, coupe, approx. 106K miles, silver w/black leather, moonroof, \$10,500. 509-9765
1946 Willys Jeep, red, GM motor, bikini top, covered seats, extra tires, \$2,500. 881-2939
1998 Dodge Grand Caravan Sport, 150K miles, new transmission, rear air, quad seats, good brakes/tires, \$4,950. 603-1273
1964 Ford F150, \$550. 256-339-0970
2004 Harley Davidson, Road King Classic, pearl white, 13K miles, garage kept, \$15,900. 776-0811
1998 Jeep Wrangler, Sahara, black/tan, adult owned, alloys, 5 speed, \$9,800. 837-1774
2006 Accord EX, white/tan, moonroof, loaded, cloth interior, 4K miles, must sell, \$21,900. 883-6894
1995 Jeep Grand Cherokee Laredo, dark green, 6-cyl., 4.0L, 125K miles, 2WD, \$3,850. 256-355-8530

Wanted

Square hitch for 2002 Toyota Highlander. 880-9025
Used heavy punching bag. 655-9267
Used iPod. 890-0621

Lost

Leatherman "Wave" multi-tool with case for wearing on belt, 2/13/07, 4:30 p.m., Bldg. 4315 Gym. 256-415-2558

Found

Black wool ladies gloves, front steps, Bldg. 4200. Call 544-3623 to claim/identify
Silver key, Schlage, south side, Bldg. 4200. Call 544-3623 to claim/identify

The colorful demise of a sun-like star

NASA Headquarters news release

A new image from NASA's Hubble Space Telescope shows the colorful "last hurrah" of a star similar to the sun. The picture was taken Feb. 6 by Hubble's Wide Field and Planetary Camera 2, which was designed and built by NASA's Jet Propulsion Laboratory, Pasadena, Calif.

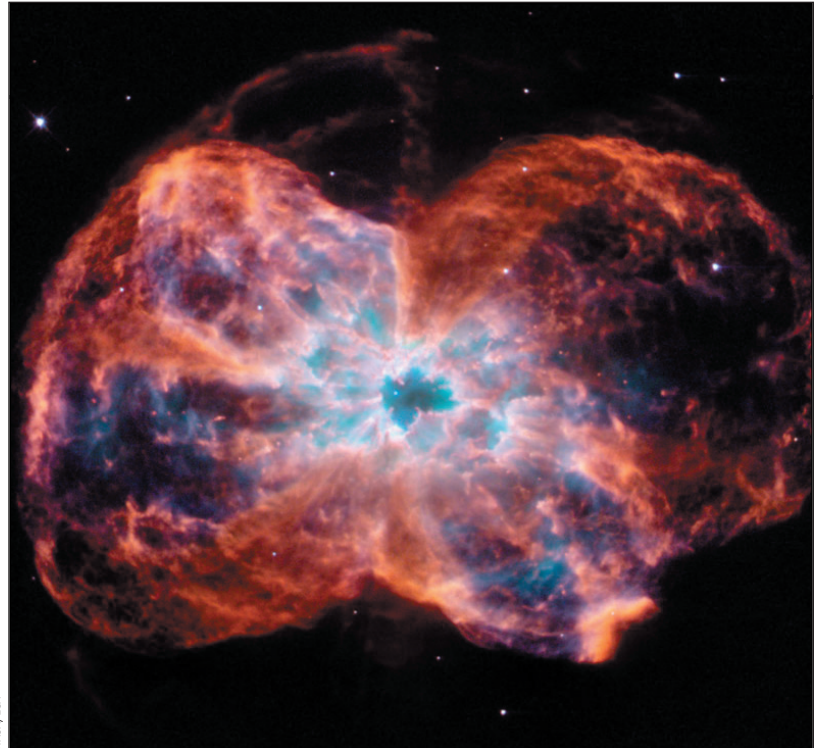
The star is ending its life by casting off its outer layers of gas, which formed a cocoon around the star's remaining core. Ultraviolet light from the dying star makes the material glow. The burned-out star, called a white dwarf, is the white dot in the center. The sun will eventually burn out and shroud itself with stellar debris, but not for another 5 billion years.

Our Milky Way galaxy is littered with these stellar relics, called planetary nebulae. The objects have nothing to do with planets. Eighteenth- and nineteenth-century astronomers named them that because through small telescopes they resembled the disks of the distant planets Uranus and Neptune.

The planetary nebula in this image is called NGC 2440. The white dwarf at the center of NGC 2440 is one of the hottest known, with a surface temperature of nearly 400,000 degrees Fahrenheit. The nebula's chaotic structure suggests that the star shed its mass episodically. During each outburst, the star expelled material in a different direction. This can be seen in the two bow tie-shaped lobes. The nebula also is rich in clouds of dust, some of which form long, dark streaks pointing away from the star. NGC 2440 lies about 4,000 light-years from Earth in the direction of the constellation Puppis.

The Hubble Space Telescope is a project of international

cooperation between NASA and the European Space Agency. The Space Telescope Science Institute in Baltimore conducts Hubble science operations. The Institute is operated for NASA by the Association of Universities for Research in Astronomy, Inc., Washington. The California Institute of Technology in Pasadena manages the Jet Propulsion Laboratory for NASA. For images and additional information on NGC 2440, visit <http://hubblesite.org/news/2007/09>.



This image, taken by NASA's Hubble Space Telescope, shows the "last hurrah" of a star similar to the sun. The star is ending its life by casting off its outer layers of gas, which formed a cocoon around the star's remaining core.

MARSHALL STAR

Vol. 47/No. 22

Marshall Space Flight Center, Alabama 35812
(256) 544-0030
<http://www.nasa.gov/centers/marshall>

The Marshall Star is published every Thursday by the Public and Employee Communications Office at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration. Classified ads must be submitted by 4:30 p.m. Thursday, and other submissions no later than 5 p.m. Friday to the Marshall Public and Employee Communications Office (CS20), Bldg. 4200, Room 103. Submissions should be written legibly and include the originator's name. Send e-mail submissions to: intercom@msfc.nasa.gov. The Star does not publish commercial advertising of any kind.

Manager of Public and Employee
Communications — Dom Amatore
Editor — Jessica Wallace

GPO: U.S. Government Printing Office 2007-623-033-20087

PRSR STD
US POSTAGE PAID
HUNTSVILLE, AL
PERMIT NO. 298